

Manage a Tablespace in the Oracle Database

A datafile of a tablespace must be allocated with sufficient space on the disk so that RiskVision Server never halts when more space is needed in the database. While setting up tablespaces as required by the RiskVision Server, you can set the datafile size of a tablespace to extend the file size automatically to a specified maximum value. When you ran into the "ORA-01654: unable to extend index" error that has interrupted the RiskVision Server from operating, the error indicates that the auto-extensible option is not set for the datafile.

In order to resume the RiskVision Server and to avoid the occurrence of the error in future, perform the following steps:

1. Run the following query to check whether the auto-extensible option is enabled and free space in the datafile is available:

```
SELECT de.file_id, df.file_name, df.AUTOEXTENSIBLE, df.bytes/1024/1024,
SUM(de.bytes)/1024/1024
FROM dba_extentions de, dba_data_files df
WHERE de.file_id=df.file_id GROUP BY de.file_id,df.file_name, AUTOEXTENSIBLE,
df.bytes/1024/1024;
```

If the above query shows any free space, perform step 2, or else go to step 3.

2. When you notice any free space, run the following query to combine all the free space chunks into one large chunk.

```
ALTER TABLESPACE aglindex COALESCE;
```

Check whether you are able to operate the RiskVision Server as before.

3. If the problem still persists, run the following query to add a new datafile to the tablespace.

```
ALTER TABLESPACE aglindex ADD DATAFILE '~\oradata\agl\datafile.dbf' AUTOEXTEND
ON NEXT 500M MAXSIZE 20G;
```

Adding a new datafile must resolve the problem.

4. If all your efforts to overcome the problem has failed even after you perform the steps above, run the following query to change the size of the existing datafile. Run this query only when you have reached the maximum number of datafiles allowed for a tablespace.

```
ALTER DATABASE DATAFILE '<~/datafile.dbf>' RESIZE 10G;
```

The sizes can be specified in the megabyte, gigabyte or terabyte. You must examine the free disk space before specifying the value for `NEXT` (a minimum size that a datafile must increment when it extends) and `MAXSIZE` (a maximum size that a datafile can automatically extend).